

CLAIMS

What is claimed is:

1. A method of notifying a mobile terminal that a wireless local area network is present, said mobile terminal being connected to a wireless communication network,
5 comprising:
determining the location of said mobile terminal;
comparing said location with a known location of said wireless local area network; and
notifying said mobile terminal of said wireless local area network via said wireless communication network in response to said comparison.
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2. The method of claim 1 wherein notifying said mobile terminal of said wireless local area network comprises transferring data regarding said wireless local area network from said wireless communication network to said mobile terminal.
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3. The method of claim 2 wherein transferring data regarding said wireless local area network comprises sending said data as a SMS message.
4. The method of claim 1 wherein determining the location of said mobile terminal
20 comprises determining the cell of said wireless communication network in which said mobile terminal is located.
5. The method of claim 4 wherein determining the location of said mobile terminal further comprises determining the sector of said cell in which said mobile terminal is
25 located.

6. The method of claim 1 wherein determining the location of said mobile terminal comprises processing signals received by said mobile terminal from two or more base stations to compute the location of said mobile terminal.

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7. The method of claim 1 wherein determining the location of said mobile terminal comprises receiving location data from said mobile terminal.

8. The method of claim 7 wherein said location data is calculated from satellite navigation signals received at said mobile terminal.

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9. The method of claim 1 wherein notifying said mobile terminal of said wireless local area network comprises broadcasting a notification of said wireless local area network over a broadcast or paging channel.

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10. The method of claim 1 wherein notifying said mobile terminal of said wireless local area network comprises notifying said mobile terminal in a manner specified by an entry in a subscriber database of said wireless communication network, said entry being associated with said mobile terminal.

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11. A method of operating a mobile computing device to conserve power, said mobile computing device including a first wireless interface for communicating with a first network, said method comprising:

placing said first wireless interface in an inactive mode;

receiving a notification indicating the presence of a first network proximate the current location of the mobile computing device from a second network;

and

activating said first wireless interface responsive to said notification.

12. The method of claim 11 wherein said mobile computing device includes a second interface and wherein said notification is received by said mobile communication device over said second interface.

13. The mobile computing device of claim 12 wherein said second interface is a wireless communication interface for communicating directly with said second network.

14. The method of claim 12 wherein said mobile computing device uses said second wireless interface to communicate with a mobile terminal, and wherein said mobile terminal relays said notification from said second network to said mobile computing device via said second interface.

15. The method of claim 14 wherein said second interface is a short-range wireless interface.

16. The method of claim 15 wherein said second interface is an optical interface.

17. The method of claim 15 wherein said second interface is a radio frequency interface.

18. The method of claim 15 wherein said second interface is a BLUETOOTH interface.

19. The method of claim 14 wherein said second interface is a wire or an optical cable.

20. The method of claim 11 wherein said first network comprises a wireless local area network.

21. The method of claim 20 wherein said wireless local area network conforms to the IEEE 802.11(b) standard.

22. The method of claim 11 wherein said second network comprises a wireless communication network.

23. The method of claim 22 wherein said wireless communication network conforms to the TIA/EIA/IS-2000 standard.

24. A method of connecting a mobile computing device to a wireless local area network, comprising:

receiving from a mobile terminal data pertaining to the presence of said wireless local area network, said data being communicated to said mobile terminal by a wireless communication network in response to detecting a current location of said mobile terminal; and
connecting said mobile computing device to said wireless local area network in response to receiving said data.

25. The method of claim 24 further comprising activating a wireless local area network interface in said mobile computing device in response to receiving said data.

26. The method of claim 25 wherein said data is transferred from said mobile terminal to said mobile computing device over a wireless data interface.

27. A wireless communication network, comprising:
a plurality of base stations operative to communicate wirelessly with at least one
mobile terminal;
a database storing location information relating to at least one wireless local area
network; and
a location estimator operative to estimate the location of said mobile terminal,
and to notify said mobile terminal if said mobile terminal is within a
predetermined range of said wireless local area network.

28. The network of claim 27, wherein said predetermined range includes a coverage
area serviced by said wireless local area network.

29. The network of claim 27, further comprising a data communications interface to
said wireless local area network.

30. A wireless communication system, comprising:

a mobile terminal;

a plurality of base stations operative to communicate wirelessly with said mobile terminal;

5 a database storing location information relating to at least one wireless local area network;

a wireless mobile computing device including a wireless local area network interface for communicating with said wireless local area network, said interface being maintained in an inactive state and placed in an active state in response to a notification received by said mobile terminal from said wireless communication network indicating the proximity of said mobile terminal to said wireless local area network.

31. The system of claim 30 wherein said wireless mobile computing device

15 additionally includes a data communication interface to said mobile terminal.

32. The system of claim 31 wherein said data communication interface comprises a wire or optical cable.

20 33. The system of claim 32 wherein said data communication interface comprises a wireless interface.

34. The system of claim 33 wherein said wireless interface is an optical interface.

25 35. The system of claim 34 wherein said wireless interface is a radio frequency interface.

36. The system of claim 35 wherein said wherein said radio frequency interface is a BLUETOOTH interface.